IN THE CLAIMS:

Please amend the claims to read as follows. The following is a complete listing of all claims and replaces any prior listing in this application.

1. (currently amended) A system for calculating the relative importance ~~contribution~~ of one or more individual **input** variables ~~in a scoring formula comprising~~ **to an overall insurance policy profitability score** ~~a multivariate expression~~, comprising:

a database for storing values associated with a set of **input** variables;

a display; and

at least one **data** processor arranged to:

generate a multivariate statistical model from the values in the database and ~~a~~ **an insurance policy profitability** scoring formula based thereon, said **insurance policy profitability** scoring formula comprising ~~at least~~ a sum of a plurality of predictive **input** variables each having a weighting co-efficient;

calculate a partial derivative of the scoring formula with respect to **one or more** ~~any~~ of the plurality of **predictive input** variables;

calculate a deviance value for any of the plurality of **predictive input** variables; ~~and~~

calculate the **relative importance** ~~contribution~~ of **said one or more** ~~any of the plurality~~ of **predictive input** variables **to a score calculated using the scoring formula** based on the calculated partial derivative and deviance values, **and**

display a score and the results of said calculations to a user.

2. (currently amended) The system of claim 1 wherein the **data** processor comprises a software module that takes the first derivative of the scoring formula with respect to **each** a selected ~~the~~ **predictive input** variable ~~being analyzed~~.

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3. (currently amended) The system of claim 1 wherein the plurality of **predictive input** variables describe characteristics of at least one of an existing policyholder and potential policyholder and the scoring formula is used to generate a score reflective of the expected loss/premium ratio for an insurance policy.

4. (original) The system of claim 3 wherein the premium for the insurance policy is based on the score.

5. (original) The system of claim 1 further comprising means for ranking the individual variables based on the calculated contribution.

6. (currently amended) The system of claim 1 wherein the data processor includes a software module that receives inputs for a mean value and a standard deviation value and the deviance value is calculated using the formula:

$$\text{Deviance of } x_i = (x_i - \mu_i)/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive **input** variable x_i.

7. (currently amended) The system of claim 1 wherein the **relative** contribution **of any of the predictive input variables** is calculated ~~for any of the plurality of variables~~ by multiplying the slope and deviance values **for that variable**.

8. (currently amended) A **computerized** method of evaluating the **relative individual** contribution of **one or more** ~~each of the plurality of~~ predictive **input** variables to ~~a score~~

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~~generated by a multivariate statistical model~~ **an insurance policy profitability score**, comprising:

generating a multivariate statistical model **to predict insurance policy profitability** from a set of ~~values associated with a set~~ of **input** variables **and their values**;

generating a scoring formula based **on said model** ~~thereon~~, said scoring formula comprising ~~at least~~ a sum of a plurality of predictive **input** variables each having a weighting co-efficient;

calculating a partial derivative of the scoring formula with respect to one or more ~~any~~ of the plurality of **predictive input** variables;

populating a database associated with the system with a mean value and standard deviation value for each of the plurality of predictive **input** variables;

calculating a deviance value based on the mean value and the standard deviation value for each of the plurality of predictive **input** variables; ~~and~~

multiplying the deviance value and partial derivative value for each of the plurality of predictive variables to determine the contribution of each of the plurality of predictive variables to ~~the~~ **a given** score, **and**

displaying said score and said contribution of each of said predictive variables to said score to a user.

9. (currently amended) The method of claim 8**,** further comprising the step of defining at least one assumption for the mean value associated with at least one of the plurality of predictive **input** variables.

10. (original) The method of claim 8 wherein the step of calculating the slope further comprises the step of calculating the first derivative of the scoring formula with respect to the predictive variable of the plurality of predictive variables that is being analyzed.

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11. (original) The method of claim 8 wherein the deviance value is calculated as follows:

$$\text{Deviance of } x_i = (x_i - \mu_i)/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive variable x_i.

12. (currently amended) The method of claim 8 further comprising the step of ranking each of the plurality of predictive **input** variables based on the contribution of a predictive **input** variable to the score wherein a predictive **input** variable having a higher calculated contribution value is assumed to have had a greater effect on the score.

13. (currently amended) A **computerized** method of evaluating the **relative** contribution of each of a plurality of predictive **input** variables **to** in a statistical model comprised of a **an insurance policy profitability** scoring formula, **said formula** comprising at least a sum of a plurality of predictive variables each having a weighting co-efficient[[;]] **,** comprising:

the steps of obtaining a mean value and a standard deviation value for each of the plurality of predictive variables,

calculating a slope value for each of the plurality of predictive **input** variables,

calculating a deviance value based on the mean value and the standard deviation value for each of the plurality of predictive **input** variables, and

multiplying the deviance value and slope value for each of the plurality of predictive **input** variables to quantify the contribution of each of the plurality of said **input** variables to the score, **and**

displaying the relative contribution of each of said plurality of predictive input values to a user,

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wherein said obtaining, calculating, multiplying and displaying are performed by one of a data processor and a digital computer.

14. (currently amended) The method of claim 13, further comprising the step of populating a storage means with the mean value and standard deviation values for each of the plurality of **predictive input** variables.

15. (currently amended) The method of claim 13, wherein ~~the statistical model is used to assess the profitability of an insurance policy and~~ each of the plurality of **predictive input** variables is associated with at least one of **a** policyholder **of the insurance policy** and **an** item **or risk** to be insured.

16. (currently amended) The method of claim 15 wherein a score generated by the model determines the price for the insurance policy and the contribution is used to identify which of the **predictive input** variables had the greatest effect on the price.

17. (currently amended) In a system that employs a **multivariate** statistical model **and** ~~comprised of~~ a scoring formula **generated therefrom** having a plurality of predictive variables for generating a score that is representative of a risk associated with an insurance policyholder and for pricing a particular coverage based on the score, a **computerized** method of quantifying the **relative** contribution of each of the plurality of predictive variables to the score ~~generated by the model~~ comprising:

generating a multivariate statistical model from a set of **variables and their respective** values associated with insurance policy risk to identify **a set of** predictive variables;

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generating a profitability scoring formula based on **said multivariate statistical model** ~~thereon~~ ~~expressed as a multivariate function~~, said profitability scoring formula comprising ~~at least~~ a sum of ~~the~~ **a** plurality of predictive variables each having a weighting co-efficient;

populating a database associated with the system with a mean value and a standard deviation value for each of the plurality of predictive variables;

calculating a slope value for each of the plurality of predictive variables;

calculating a deviance value based on the mean value and the standard deviation value for each of the plurality of predictive variables; ~~and~~

multiplying the deviance value and slope value for each of the plurality of predictive variables to quantify the contribution of each of the plurality of predictive variables to the score, **and**

displaying said contributions to a user.

18. (currently amended) The method of claim 17 further comprising ~~the step of~~ ranking each of the plurality of **predictive** variables based on the quantified contribution as calculated for each of the plurality of predictive variables.

19. (currently amended) The method of claim 17 wherein said ~~the step of~~ calculating the slope further comprises the step of calculating the first derivative of the scoring formula with respect to a predictive variable of the plurality of predictive variables that is being analyzed.

20. (original) The method of claim 17 wherein the deviance value is calculated as follows:

$$\text{Deviance of } x_i = (x_i - \mu_i)/\sigma_i$$

where μ_i is the mean for x_i and σ_i is the standard deviation for predictive variable x_i.